

# Aerospace Testing Seminar



"The Challenge of Effective and Affordable Testing"

Sheraton Gateway Hotel Los Angeles

**Oct. 16 – 18, 2012**

## Celebrating Four Decades of the Aerospace Testing Seminar

**ABSTRACT SUBMITTAL FORM: Abstracts due January 16, 2012**

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Please indicate "Yes" or "No", in the field to the right, if the work has more than the three authors listed above. We will receive the extended list at a later time. <input type="checkbox"/>			More Authors: YES
<b>I. ABSTRACT TITLE</b> (PLEASE ENTER ABSTRACT TITLE) <b>Common Data Acquisition Systems (DAS) Software Development for Rocket Propulsion Test (RPT) Test Facilities</b>			
<b>II. ABSTRACT</b> (PLEASE ENTER ABSTRACT OF 200 WORDS OR LESS. ENCLOSE ATTACHMENTS AS NEEDED) <p>The advent of the commercial space launch industry and NASA's more recent resumption of operation of Stennis Space Center's large test facilities after thirty years of contractor control resulted in a need for a non-proprietary data acquisition systems (DAS) software to support government and commercial testing. The software is designed for modularity and adaptability to minimize the software development effort for current and future data systems. An additional benefit of the software's architecture is its ability to easily migrate to other testing facilities thus providing future commonality across Stennis. Adapting the software to other Rocket Propulsion Test (RPT) Centers such as MSFC, White Sands, and Plumbrook Station would provide additional commonality and help reduce testing costs for NASA. Ultimately, the software provides the government with unlimited rights and guarantees privacy of data to commercial entities.</p> <p>The project engaged all RPT Centers and NASA's Independent Verification &amp; Validation facility to enhance product quality. The design consists of a translation layer which provides the transparency of the software application layers to underlying hardware regardless of test facility location and a flexible and easily accessible database. This presentation addresses system technical design, issues encountered, and the status of Stennis' development and deployment.</p>			
<b>III. SESSION (S)</b> (REFER TO THE "CALL FOR PAPERS" FOR SESSION DESCRIPTIONS & INDICATE THE PRIMARY SESSION THAT MOST IDENTIFIES WITH THE WORK. PRIORITIZE THE SESSIONS, UP TO 3 USING THE FOLLOWING SCALE: <b>PRIMARY SESSION = 1, SECONDARY SESSION = 2, ALTERNATE SESSION = 3)</b>			
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Additional Authors and contributors will be supplied upon request.

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